

Title (en)  
APPARATUS AND METHOD FOR GENERATING MICROGRAVITY

Title (de)  
VORRICHTUNG UND VERFAHREN ZUR ERZEUGUNG VON MIKROGRAVITATION

Title (fr)  
APPAREIL ET PROCÉDÉ POUR LA GÉNÉRATION DE MICROGRAVITÉ

Publication  
**EP 3782915 A1 20210224 (EN)**

Application  
**EP 18745991 A 20180418**

Priority  
ES 2018070311 W 20180418

Abstract (en)  
An apparatus (1) for generating microgravity comprising: a first rotating body (12) for rotating around a first shaft (12a), actuated by first actuation means (24), a means (60) for housing a sample circumscribed in the first rotating body (12), a second rotating body (11) for rotating around a second shaft (11a) actuated by second actuation means (23) and disposed in the interior of a volume delimited by the second rotating body (11), a third rotating body (10) for rotating around a third shaft (10a) actuated by third actuation means (21, 22) and disposed in the interior of a volume delimited by the third rotating body (10). The first, second and third actuation means are independent from each other, the rotation of each shaft being independent from the rotation of the other shafts. The rotation of said rotating bodies generates a level of simulated microgravity in the means for housing a sample. The apparatus comprises processing means for controlling the rotation of each shaft through the application, in each shaft, of a pseudo-random value of rotation speed during a pseudo-random time value, achieving an instability effect to prevent the sample housed in said means from adapting to the simulated microgravity generated by the apparatus (1).

IPC 8 full level  
**B64G 7/00** (2006.01); **G09B 9/00** (2006.01); **G09B 9/12** (2006.01); **G09B 9/16** (2006.01); **G09B 9/52** (2006.01)

CPC (source: EP)  
**B64G 7/00** (2013.01); **G09B 9/00** (2013.01); **G09B 9/12** (2013.01); **G09B 9/165** (2013.01); **G09B 9/52** (2013.01)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3782915 A1 20210224; EP 3782915 B1 20230906; EP 3782915 C0 20230906**; ES 2967069 T3 20240425; WO 2019202178 A1 20191024

DOCDB simple family (application)  
**EP 18745991 A 20180418**; ES 18745991 T 20180418; ES 2018070311 W 20180418